Chicago

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# Chicago Transit Authority

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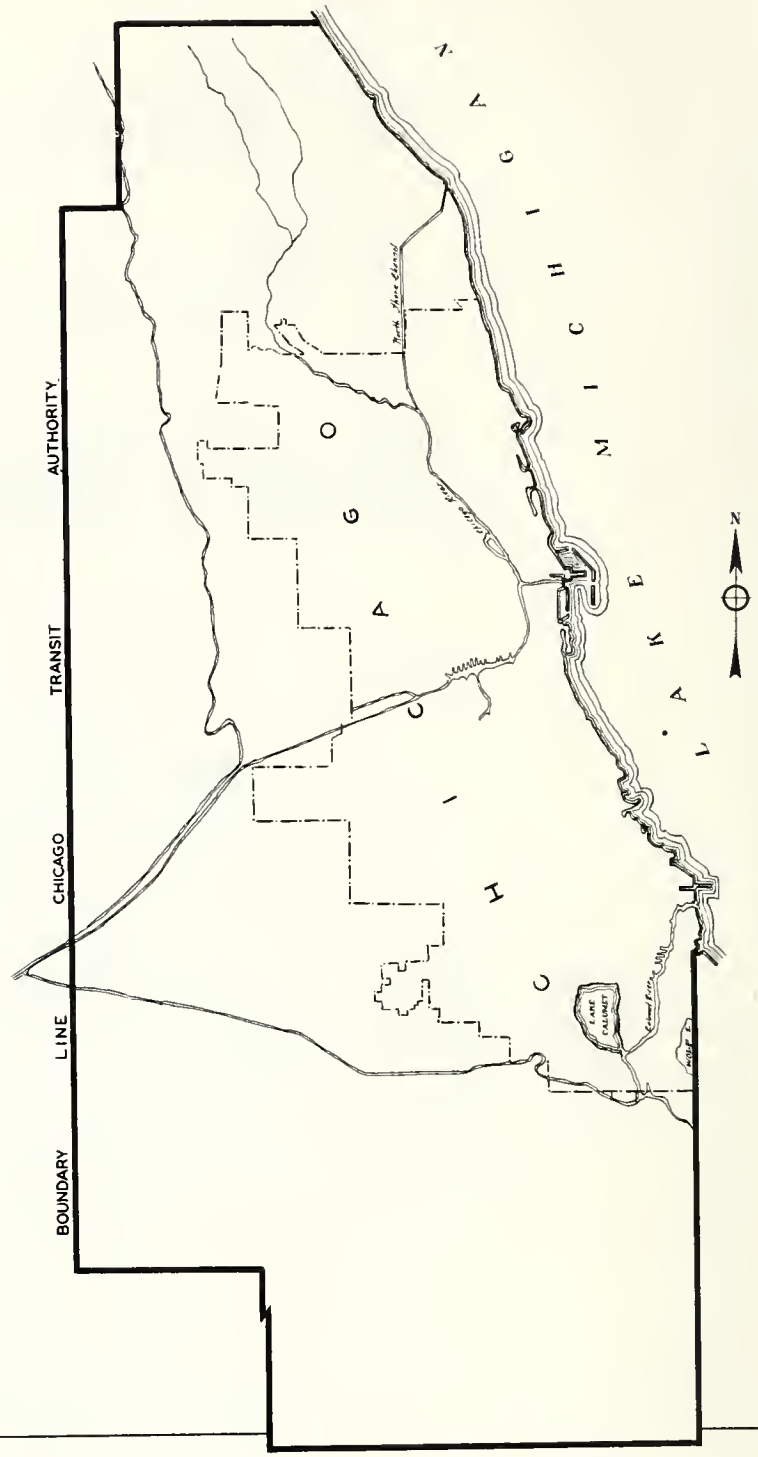
NOTE: (M) Appointed by the Mayor of the City of Chicago
(G) Appointed by the Governor of the State of Illinois

FEBRUARY 15, 1957

## Chicago Transit Authority's Operating Territory



# Organization and duties of Chicago Transit Authority

*Section One*

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# Chicago Transit Authority

Chicago Transit Authority is a self-governing, self-regulating governmental agency, separate and apart from all other governmental agencies. It owns and operates Chicago's major local transit facilities on a service-at-cost basis.

CTA operating properties include the former Chicago Surface Lines, the former Chicago Rapid Transit Company, the former Chicago Motor Coach Company and the city-owned initial system of subways, the State Street subway and the Milwaukee Avenue-Dearborn Street subway, and will include the new city-owned West Side subway now under construction.

Presently CTA has 10 rapid transit routes totaling 210.73 miles of route, and 138 surface routes totaling 1,873.9 miles of route. CTA's operating territory includes all of Cook County, excepting the 6 townships of Barrington, Palatine, Wheeling, Hanover, Schaumberg and Elm Grove in the northwest and Lemont in the southwest part of the county.

## *Established by Legislation*

Chicago Transit Authority was established by legislation approved April 12, 1945, and ratified by a referendum of the voters of Chicago and Elmwood Park on June 4, 1945. On June 4, 1945, also, the voters of Chicago approved the granting of a 50-year franchise to Chicago Transit Authority, giving it the exclusive right to operate local transit facilities in Chicago's streets and the privilege of operating the city-owned subways.

CTA began local transit operations October 1, 1947, by purchasing the properties of the former Chicago Surface Lines and the former Chicago Rapid Transit Company for a total of $87,162,500. The net purchase price, however, was only about $62,162,500, since CTA obtained about $25,000,000 in renewal funds cash when it bought the Chicago Surface Lines. These two properties were claimed to have a book value ranging from $250,000,000 to $300,000,000.

On October 1, 1952, Chicago Transit Authority purchased the Chicago Motor Coach Company for approximately $16,400,000, thus becoming owner and operator of the city's three local transit systems that for years had been operated as separate, competing companies.

A year later CTA purchased the elevated right-of-way and operating fixtures from Montrose Avenue, Chicago, to Linden Avenue, Wilmette, which the former Chicago Rapid Transit Company had operated under a lease arrangement with the owner, the Chicago, Milwaukee, St. Paul and Pacific railroad.

Purchase of these properties was financed by the sale of revenue bonds to private investors. The bond issues were as follows—Series of 1947, $105,000,000; Series of 1952, $23,000,000; Series of 1953, $7,000,000. From the first two bond issues, CTA also obtained cash that was used for improvements of the properties.

None of CTA's extensive holdings is mortgaged to assure payment of principal and interest charges of the outstanding bond issues. Revenue bonds are not mortgage bonds. Payment of principal and interest charges on bonds of this type is made only from operating income.

**CHICAGO TRANSIT Authority has purchased 1,301 propane-fueled buses—the nation's largest fleet. The first 551 of these buses were built in 1950-51. Known as "liquefied petroleum gas," propane enters the fuel tank of the bus as a liquid, but it is changed to a gas as it travels under pressure between the tank and the engine. Propane buses have such modern features as forced ventilation, thermostatically-controlled heating, bull's eye lighting and "double-stream" doors.**

**THERE ARE now 700 diesel buses operating on Chicago Transit Authority surface lines. Seating capacity of these modern diesel buses varies from 32 to 55 passengers. A high standard of illumination is assured by modern lensed light fixtures. These buses are equipped with automatic, thermostatically-controlled heating and forced air ventilating systems.**

**EXPERIMENTS** with light-weight, high-performance cars resulted in this train which attained a speed of 76 miles per hour in a test run. These four units can be operated as a single train, as two two-car trains or as two-car units in longer trains of CTA's other light-weight rapid transit equipment. These cars differ from CTA's conventional light-weight cars of this type in that they can accelerate at a constant, rapid rate up to 30 miles per hour. Other new features include heavier trucks, 28-inch solid steel wheels and new type motor and controls.

**AS OF** February 15, 1957, there were 529 new "Green Hornet" all-metal rapid transit cars operating on Chicago Transit Authority routes. Deliveries of 145 more cars of this type were being made weekly. All of these cars are designed to provide fast, noise-proofed rapid transit service. Trucks and wheels are rubber-insulated and the motors and brakes are designed for rapid acceleration and deceleration. Improved riding comfort, forced ventilation, thermostatically-controlled electric heating and wide aisles are some of the modern features of the new cars. Light-weight and insulated against noise, these cars embody every known feature for the safety and comfort of passengers.

**ONLY** one streetcar route remains on CTA's surface system—Clark-Wentworth. Each of these smooth-operating PCC streetcars has a seating capacity of 57 passengers. The cars have a combination of dynamic and drum brakes. A magnetic track brake is also provided for emergency use. Some of the modern features of these cars include forced ventilation, thermostatically-controlled electric heating and direct overhead lighting fixtures. The doors are designed for fast loading and discharging of passengers.

## *Reasons For Establishing CTA*

For more than half a century, Chicago had been struggling to solve its local transit problems. The situation reached a critical stage in the late 20's when the Chicago Surface Lines and the Chicago Rapid Transit Company became involved in receivership and bankruptcy proceedings.

In 1945, after failure of six separate and prolonged attempts to reorganize the two companies with the aid of private capital, the then Governor of Illinois and the then Mayor of Chicago suggested the establishment of a public authority to acquire, own and operate the city's local transit facilities as the only practical solution of the city's traction problems.

Their suggestion was endorsed by civic leaders, by commercial and industrial leaders, by community organizations, and by outstanding business organizations. They, too, were convinced that private capital could no longer be induced to support local transit under the conditions that long had existed. The two companies had repeatedly been denied permission to charge rates of fare sufficient to meet advancing operating costs and expenses of modernizing equipment.

Consequently, transit service and transit equipment were below acceptable standards and were continuing to deteriorate. For the Chicago Rapid Transit Company, particularly, the situation was desperate, indeed. It was having extreme difficulty in just meeting its payrolls.

## *Powers and Duties of Chicago Transit Authority*

Chicago Transit Authority is a public corporation possessing some of the major advantages that are enjoyed by a privately-owned and privately-financed corporation. For example, the CTA may exercise its own judgment in the operation of the properties, subject only to the mandatory requirement that it must provide modern, attractive and convenient service at actual cost.

Since CTA must operate on a service-at-actual-cost basis, it is given the exclusive right to establish rates of fare. By law, the rates of fare must be sufficient in the aggregate at all times to pay operating costs, including debt service, and the costs of modernizing equipment and service.

There are no profits from the operation in the accepted meaning of the term. All income in excess of operating and maintenance costs and fixed charges must be invested in service and equipment improvements.

Thus, in effect, CTA is a co-operative enterprise in which the participants are the management of the Authority, the local transit riders, and the private investors from whom capital funds are obtained by the sale of revenue bonds and equipment trust certificates. This arrangement makes CTA's management directly responsible to the public for efficient and economical operation of the properties.

Unlike other public agencies, CTA is specifically denied the privilege of levying taxes for the purpose of paying operating costs, modernizing its service and equipment, or extending its operations.

## *Organization of CTA*

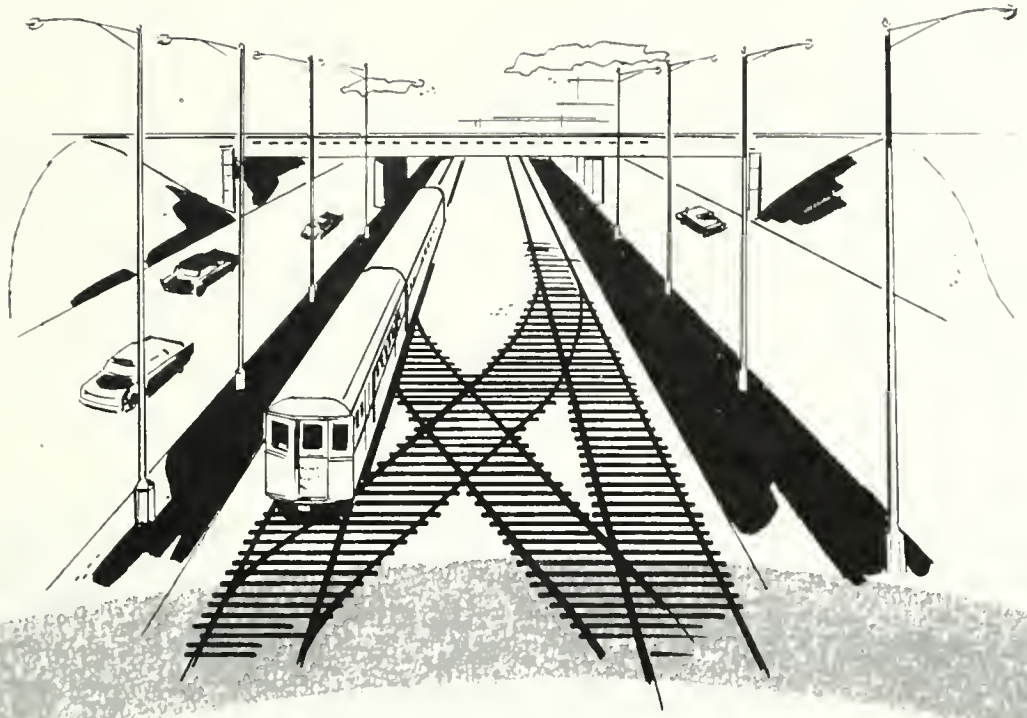
Chicago Transit Authority is governed by Chicago Transit Board which consists of seven members, four of whom are appointed by the Mayor of Chicago and three by the Governor of Illinois. The term of each member is for a period of seven years, and each, excepting the Chairman of the Board, may be paid a salary of $15,000 annually.

The Chairman, who is elected by the members of the Board, is required to devote all of his time to the affairs of the Authority. The Chairman's salary is presently fixed at $35,000 a year. All members of the Board are required to be men of recognized business ability. One of the members appointed by the Governor must be a resident of the Chicago suburban area.

The day-to-day affairs of CTA are directed by a General Manager who must be, and is, a career man in the local transit industry. His salary is $35,000 a year. Assisting him is a staff of experts in local transportation.

**CTA IS presently operating 784 gasoline buses. Most of these buses are equipped with automatic transmissions that provide fast, even acceleration. The ride is smoother and quieter than that provided by the old type streetcars they replaced. Like other modern CTA vehicles, these buses are equipped with thermostatically-controlled heating and forced air ventilation.**

**OF THE 593 trolley buses operated by Chicago Transit Authority, 561 were purchased as part of CTA's modernization program. The latest of these silent-operating, modern trolley coaches seat 49 passengers each. Forced heating and ventilating systems controlled by thermostats, individual lights over the seats and extra wide aisles assure a comfortable ride for passengers. These buses are also equipped with large, double-streamed exit and entrance doors for speedy loading and unloading of passengers.**



# Accomplishments of CTA

*Section Two*

# ACCOMPLISHMENTS OF CTA

Through the establishment of Chicago Transit Authority, and its purchase, operation and consolidation of the city's major transit facilities, Chicago has achieved objectives that had been sought for more than half a century.

These objectives were:

1. Unified ownership and operation of the city's major mass transit companies under full "home rule" powers.
2. A single fare for travel anywhere within the city.
3. A universal transfer privilege permitting local transit riders to use the combination of routes and services most convenient for them.

Aside from these major overall objectives, CTA has also accomplished the following:

1. Launched a ten-year initial equipment and service modernization program, unequaled in extent in Chicago's local transit history, which is now nearing completion on schedule.
2. Consolidated three companies and their three separate operating departments into a single task force geared to vigorous efforts to provide modern, convenient and attractive service at actual cost.
3. Pioneered in the large scale use of LP-gas (liquid petroleum) buses, and in the development of an all-metal, light-weight, high-speed rapid transit car.
4. Speeded up rapid transit service so that it now is the fastest rapid transit service that Chicago has ever had.
5. Integrated the rapid transit and surface systems by establishing feeder bus routes serving rapid transit stations and by making interchange between the two systems more convenient and more attractive, thus extending rapid transit benefits to more sections of the city.
6. Substantially reduced operating costs by the introduction of a wide range of economies that also furthered the service and equipment modernization program. Operating costs are now at least $35,000,000 a year below the 1948 level for the three companies that now constitute CTA.

The whole CTA organization is now functioning smoothly and efficiently in performing the complex and essential task of providing a comprehensive, convenient local transit service for the Chicago area.

## *Consolidation of the Properties*

One of the major tasks that immediately confronted CTA was the consolidation of management departments. By its purchase of the Chicago Surface Lines and the Chicago Rapid Transit Company, CTA acquired two complete operating staffs and their personnel. These departments and their staffs had to be welded into a single, efficient operating team.

Then, in 1952, when CTA purchased the Chicago Motor Coach Company, the process of consolidation had to be repeated. Today CTA has only one set of departments operating as an effective, efficient unit.

## *Modernization of Service*

Coincident with the consolidation of duplicate departments and their staffs, CTA undertook an extensive and continuing service and equipment modernization program.

Today Chicago has the fastest rapid transit service in its history. This was achieved by establishing an alternate-stop, all-express plan of operation on the major rapid transit routes during the hours of heaviest travel.

On the Lake Street route, where the all-express plan was first introduced, travel time between the west terminal and the Loop was reduced by ten minutes. On the North-South route, where the volume of rapid transit riding is greatest, travel time between the outer terminals and the Loop has been reduced six minutes.

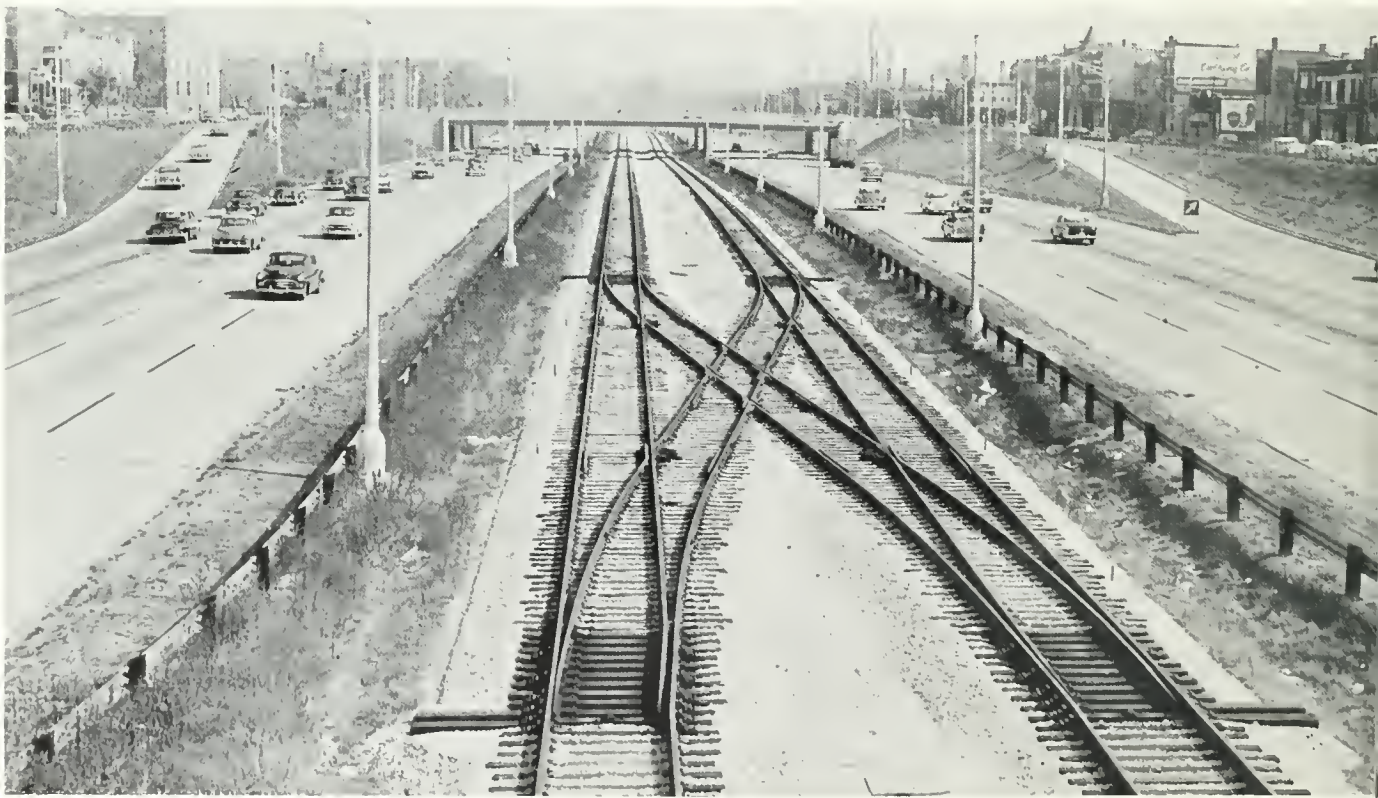
**CTA'S OFF-STREET terminal at Western and Berwyn Avenues is one of approximately 100 operated by CTA throughout the city of Chicago.**

**USE OF four convenient CTA Park 'N' Ride lots at rapid transit terminals has been building up steadily as motorists seek to avoid the growing traffic congestion on city streets by driving part of the way and riding the rest of the way on faster "L" or subway trains. Two of the lots are pictured here. The photo on the left shows the largest of the parking areas at the end of the Garfield Park rapid transit route at Des Plaines avenue, Forest Park. This lot has a capacity of 420 automobiles. The photo on the right shows the Park 'N' Ride lot at 54th avenue in Cicero, the terminal of the Douglas Park "L" route. Three hundred autos can be accommodated at this location.**

The running time between Logan Square and the Loop was cut approximately in half, a reduction of about 15 minutes, when the city-owned Milwaukee Avenue-Dearborn Street subway was added to CTA's operating facilities.

Another major rapid transit improvement is the combination rapid transit-bus terminal. One of these new facilities is at 54th Avenue in Cicero, where feeder buses and Douglas Park rapid transit trains interchange passengers at a common platform. Another terminal of this type is at Des Plaines Avenue, Forest Park, where across-the-platform transfer facilities are made between the Garfield Park rapid transit route and CTA's Westchester bus route, other suburban buses, and Chicago, Aurora and Elgin interurban electric railroad.

At these terminals, the first of their kind on Chicago's rapid transit system, the CTA established "Park 'N' Ride"



**THE CONGRESS Street Expressway, with the CTA rapid transit median strip under construction, is shown as it appeared near Independence Boulevard in October, 1956.**

lots for its patrons. Facilities of this type are now also located at two other rapid transit terminals—at Kimball and Lawrence Avenues, the northwest terminal of the Ravenswood line; and at Linden Avenue, Wilmette, the north terminal of the North-South and the Evanston routes.

Others measures contributing substantially to improve rapid transit service were the elimination of wasteful duplication of services and competition between the rapid transit system and the surface system, the discontinuance of the former practice of intermingling local and express trains, the closing of lightly used rapid transit stations, and the cutting off of dead and dying rapid transit branch routes where patronage over the years had dwindled to the point where daily receipts were not even sufficient to pay operators' wages. In each instance where branch service was eliminated, bus service was provided or was conveniently available.

Further improvements in rapid transit service are in progress. Not later than 1958, the Garfield Park route, which serves the West Side of Chicago, and Oak Park and Forest Park, will be operating on a high-speed private right-of-way in the median strip of the Congress Street Superhighway between Laramie Avenue and the Loop.

Shortly thereafter, as construction on the superhighway progresses, this median strip rapid transit operation will extend as far west as the present terminal at Des Plaines Avenue, Forest Park.

This superhighway median strip operation, the first of its kind in the United States, is to be duplicated in the Northwest Expressway which is scheduled to go into construction in the near future. A connection between the Logan Square rapid transit route and the Northwest Expressway is to be made between Talman and Rockwell Avenues, and trains are to operate in the median strip of the expressway at least to Foster and Central and possibly to a point near the city limits at Canfield Avenue.

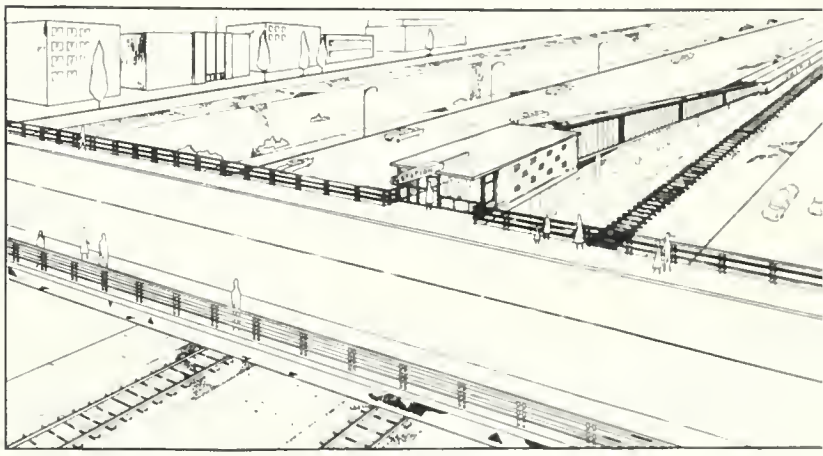
Both of these projects are being jointly financed by other public agencies—the City of Chicago, Cook County, the State of Illinois and the Federal Government. For the West Side subway in the median strip of the Congress Expressway, the City of Chicago alone is spending $25,000,000. The exact cost of the rapid transit facility in the Northwest Expressway has not yet been determined.

Patronage of CTA's rapid transit system is now steadily increasing, and a faster rate of increase is anticipated when these two median strip rapid transit facilities are in operation.

On the Surface System, where there has been extensive conversion from fixed-rail streetcars to free-wheeling, rubber-tired buses, a degree of flexibility of operations has been attained that was utterly impossible when streetcars dominated the Surface System fleet.

This flexibility of operations simplified integration of the Rapid Transit and Surface Systems. It also contributes materially to regularity and dependability of service. Buses are much more maneuverable in the city's traffic-jammed streets, when heavy rains flood underpasses, and when fires or automobile accidents occur on local transit streets, causing blockades over which CTA has no control. When these situations occur, buses are simply detoured around the blockades, or are substituted for streetcars when service on CTA's one remaining streetcar route is temporarily stalled.

Substitution of buses for streetcars also has made easier, and in some instances has actually made possible, the establishment of one-way streets to expedite the flow of vehicular traffic. It has also simplified the task of the city, the county and the state in their extensive street resurfacing and repaving programs.



**OPERATION OF** high-speed, traffic-free rapid transit service in the median strip of the west side expressway will be an innovation in modern transportation. The illustration shows a typical section with traffic movements, train operation and a passenger station.

**PROVIDING SERVICE** for 2,000,000 CTA daily passengers requires more than 4,400 buses and cars. With approximately 40% of the riding in the four hours of the A.M. and P.M. rush periods, CTA must maintain more than 2,600 units for only a few hours of operation each day. This photo shows a storage yard in a non-rush period when well over half of CTA's great fleet is idle.

Unfortunately, however, the flexibility of buses is being progressively impaired by the increasing severity of traffic congestion and traffic delays. It is clearly evident that Chicago's great and urgent need is fast expansion of its existing off-the-street, grade-separated rapid transit facilities.

## *Modernization of Equipment*

Chicago Transit Authority's 10-year modernization program is the most extensive in the history of local transit in Chicago and one of the most outstanding in the transit industry in a comparable period of time.

For new buses and cars and other modern facilities, CTA has spent or obligated a total of $127,000,000, including purchases planned for 1957. Modernization of Surface System equipment is now complete, and modernization of rapid transit equipment will be complete and the last of the old wood-steel elevated cars retired in 1958. The last of the old red streetcars disappeared May 30, 1954.

In 38 years preceding the start of the modernization program, the two principal predecessor companies, the Chicago Surface Lines and the Chicago Rapid Transit Company, had invested only $46,000,000 in new rolling stock.

By the 1957 year-end, 4,256 buses and cars will have been purchased in this program, exclusive of the modern buses acquired by purchase of the Chicago Motor Coach Company properties. Of these 4,256 units, all except 215 rapid transit cars and 250 buses have been received and are in regular, daily service as of February 1, 1957. Delivery of all this equipment is scheduled to be completed in 1957 except 70 rapid transit cars to be delivered in 1958.

These equipment purchases include 900 gasoline and

**PANORAMIC VIEW of Forest Glen station, at Elston and Armstrong avenues, which was put into service December 4, 1955. This modern installation services vehicles of 12 gas bus and trolley bus routes.**

diesel buses, 600 "Green Hornet" streetcars, 561 trolley buses, 744 all-metal rapid transit cars, 1,301 LP-gas (liquid petroleum) buses and 150 buses to be ordered. Among the 744 all-metal rapid transit cars are 540 cars (including 70 units to be ordered) that have been or will be fabricated from components of an equal number of "Green Hornet" streetcars that have been or are to be retired from service. This procedure results in a saving of about $20,000 per rapid transit car, which is equivalent to the cost of a modern bus.

In this extensive equipment modernization program, CTA has pioneered in three major respects. It developed the light-weight, all-metal rapid transit car, adapting the design of the "Green Hornet" streetcar to a car for rapid transit operation; it developed the procedure for using components from retired "Green Hornet" streetcars in fabricating "Green Hornet" rapid transit cars, and it purchased and now operates the world's largest fleet of LP-gas buses.

Every section of Chicago is now served by modern surface system equipment, and by early 1958 modern all-metal cars will serve the entire rapid transit system. Also in 1957, CTA plans, with the 150 buses to be ordered, to replace the last of Chicago's street cars and to retire certain buses that will be fully depreciated.

To finance these record-breaking purchases of modern equipment, CTA has provided a substantial amount of cash from depreciation reserve and modernization funds. The balance has been obtained by the sale of equipment trust certificates to John Nuveen and Company, a Chicago firm of investment bankers. These equipment trust certificates, like CTA's outstanding revenue bonds, are retired from operating revenue.

CTA's equipment purchases are notable in other important respects. First, the initial purchase of 500 LP-gas buses from the Twin Coach Company of Kent, Ohio, established two precedents in local transit history. It was one of the largest orders for buses ever placed at one time, and it was the transit industry's first order for a large fleet of LP-gas buses.

**ANOTHER MODERN facility erected by CTA is the North Park bus garage at Foster and Kedzie avenues on the northwest side. The building shown here houses facilities for servicing buses. Offices of supervisory personnel, clerical employes and a trainroom for operators are in a separate building at this location.**

With the purchase of 349 trolley buses on August 7, 1950, CTA also made transit history. This purchase, too, was the largest order for trolley buses ever placed at one time by a local transit company.

Among the factors influencing CTA's decision to pioneer large scale use of LP-gas buses are the low operating costs of buses of this type, the assured abundance of the supply of low-cost LP-gas fuel, and the safety of liquid petroleum gas. From the public's point of view, however, the most important factor probably is the fact that LP-gas burns without odor, making it an ideal fuel for local transit operations.

The odor-free characteristic of LP-gas is an important contribution to the reduction of air pollution in Chicago. In the field of noise reduction, CTA's modern equipment is also making an important contribution since all of the modern equipment is rubber-insulated and noise-proofed.

## *Modernization of Other Facilities*

Along with modernization of passenger equipment, CTA is modernizing other facilities at a cost of approximately $30,000,000. Three modern bus garages—Beverly, at 103rd and Vincennes; North Park, at Kedzie and Foster Avenues, and Forest Glen, at Elston and Armstrong Avenues—have been built and are now in operation.

A four-track structure through the Wilson rapid transit station is planned for 1957. With this addition there will be two tracks for virtually exclusive use of North-South trains over the entire route and two tracks for Evanston, Ravenswood and North Shore trains.

New tools and new maintenance methods, required by drastic changes in types of equipment, have been put in use at all CTA shops.

The General Offices, formerly dispersed in five separate locations, have been consolidated and are located on a single floor of the Merchandise Mart. In the accounting department, large-scale introduction of mechanical equipment and new procedures have cut costs materially.

Within its financial capabilities, CTA is continually seeking to improve its operations. For example, it is currently testing a "speed ramp" at the 63rd and Loomis Boulevard terminal of the Englewood rapid transit branch to determine whether this equipment is practical as a substitute for or a supplement to the existing stairs at rapid transit stations, particularly the elevated stations.

**FOR ITS annual battle to maintain transit service during winter's snow and ice, CTA has a stand-by fleet of 320 snow-fighting vehicles. This massed fleet consists of 48 CTA trucks, 51 CTA sand and salt buses, 36 CTA rail cars, and 185 rented trucks. Many of the units are equipped with automatic salt and sand spreaders, or plows, or both. The picture on the next page shows a typical Chicago winter street scene with a CTA snow plow in action clearing the way so that buses can continue operations with a minimum of inconvenience to patrons. The picture below shows a close-up view of one of CTA's snow plow trucks, with its plow blade attached. In a severe winter, snow-fighting costs may total a million dollars. This is a heavy burden upon local transit riders, from whose fares the cost of this emergency work must be paid, although the work done also benefits private motorists.**

## *Operating Economies*

In the financial phases of CTA operations, there have also been gratifying accomplishments. CTA operations began during the early period of the present inflationary economic trend. Wage and material costs have advanced sharply, but CTA's operating costs are at least $35,000,000 below the level of operating costs for 1948, the first full year of CTA operations.

CTA's modernization program has produced a large part of these economies. Substitution of buses for streetcars, for example, sharply reduced labor costs and eliminated costly maintenance of streetcar track and overhead power distribution facilities. On the rapid transit system, most of the cars are now equipped with automatic door controls, permitting a substantial reduction in operating costs.

The personnel, formerly totaling approximately 23,000 employes for the three underlying companies, now is about 11,500 employes.

## *Urgent Need For More Rapid Transit Facilities*

After almost ten years of CTA operation of the city's local transit facilities, it is clearly evident that Chicago's urgent need is large-scale expansion of existing off-the-street, grade-separated rapid transit facilities.

CTA, unfortunately, cannot finance these extensions that are so vital to Metropolitan Chicago's progress and economic welfare, and the present law prohibits CTA from obtaining the necessary funds by levying taxes.

To finance the necessary extensions out of operating revenues, as CTA is now required to do, would mean that rates of fare would have to be increased to exorbitant levels. Furthermore, it would be rank injustice to impose this heavy financial burden upon local transit riders alone. Providing these urgently needed traffic-free extensions of local transit service is just as much a community responsibility as providing highways, police and fire protection

**A SUBSTANTIAL contribution in reducing the noise level on Chicago's streets has been and is being made by CTA's modern buses, noise-proofed streetcars and rapid transit cars. The flexibility of motor buses has made easier the establishing of one-way streets and also has simplified the job of the City, County and State in paving or resurfacing city streets. Toward the cost of street improvements, where buses have replaced streetcars, CTA contributes $10,000 per double-track mile. In the period from 1945 to November 1, 1956, a total of 390.89 miles of streets formerly served by streetcars has been resurfaced or repaved. The City of Chicago's share of this extensive program covered 265.62 miles; Cook County 78.84 miles; and the State of Illinois 46.43 miles. Ironically, the contributions made by CTA in improving Chicago's streets has actually made it more difficult for CTA to operate. The smoother-riding, repaved streets have attracted more motorists, resulting in reduced income through less riding on CTA vehicles and more traffic congestion which slows up CTA service. These pictures show East 92nd Street, looking west from Buffalo Avenue, before and after repaving.**

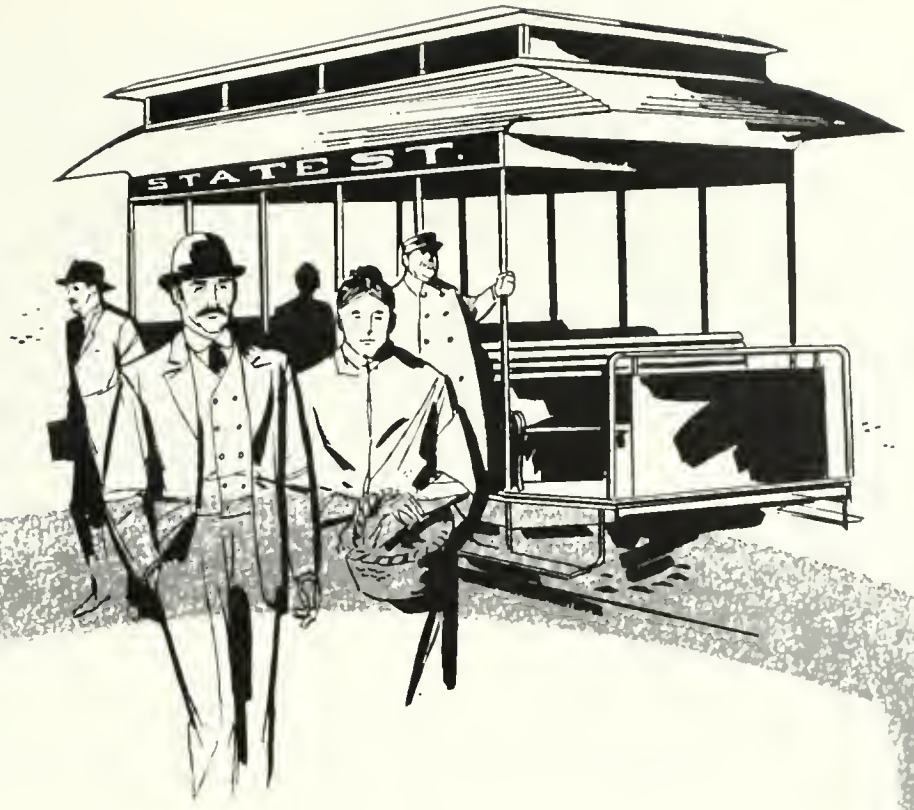
services, health and sanitation services, water-works, and parks and playgrounds.

Terrifically intense competition from the private automobile has completely changed the character of local transit. It is no longer a lucrative monopoly. The private automobile is competing with it for both passengers and street space. Daily surface local transit is becoming more handicapped by street traffic congestion resulting from the sharply increasing ownership and use of the private automobile.

Traffic delays to CTA's local transit services are now costing an estimated $117,000,000 annually. Of this amount about $5,000,000 is paid by the riders themselves through increased operating costs that are reflected in the rates of fare.

Local transit, however, is still a completely indispensable public service for the Chicago metropolitan area. Certainly, the private automobile cannot perform local transit's job; nor can any public agency, or any combination of public agencies, finance the facilities—a greatly expanded street system, a vast system of expressways and off-street parking facilities—that would be required if the private automobile were to be substituted for local transit service.

The alternative then is public financing of large capital cost extensions of the rapid transit facilities now being operated by CTA. For consideration by public officials, civic leaders and the public generally, Chicago Transit Authority is now preparing a comprehensive program of off-the-street rapid transit extensions to be financed from public funds.




# Historical Information

*Section Three*

**IN SHARP contrast with the modern, comfortable and efficient vehicles operated today on CTA's various Surface and Elevated-Subway routes are these pictures of transportation equipment used in Chicago in a bygone era. The "Bob Tail" horse car was the vogue around 1860. These cars, 12 feet in length, seated 18 passengers, were illuminated by "coal-oil" lamps and had a speed of three miles per hour. No heat was provided in winter, but straw was strewn on the floor to help keep feet warm. The cost of one of these cars and the "hay burner" motor was $700.**

## *Chicago Surface Lines*

The modern fleet of passenger-carrying vehicles operated on surface routes by the CTA today is a far cry from the type of passenger equipment used when service was inaugurated on Chicago's first street railway line about 100 years ago.

This was a horse car line which began operation on State Street, between Randolph and 12th Streets, on April 25, 1859, when Chicago had a population of about 108,000.

Called bobtails, because they had no rear platform, the cars were about 12 feet long, seated 18 passengers, and operated at a speed of about three miles per hour.

There were no conductors in those days and passengers entered at the rear of the cars, dropping their fares into a slot which led to a box at the driver's end of the car. Because no heat was provided, the floor was covered with hay or straw in the winter. Light was afforded by two kerosene lamps in opposite corners of the roof.

This service was extended and numerous other routes established over the next few years so that by 1866 the State Street horse car line went south as far as 39th Street, at that time the southern city limits in Chicago.

The next decade was one of rapid growth for the south side of Chicago, and by 1877 horse cars also were operating on Halsted Street south to 39th, and by 1881 on Clark-Wentworth. Progressive service extensions pushed the State Street line southward to 68th Street; the Wentworth Avenue line to 80th and Vincennes, and the Halsted line to 79th. East-west routes also were established during this period, notably on 59th Street, 61st Street, 63rd Street and 69th Street. This mode of public transport also soon spread to north and west side streets.

In the interim a new and faster means of local transit had entered the picture. Cable cars had proved capable of speed up to 14 miles an hour, and in 1882 the first cable car line began operating on State Street north of 21st Street. It was the beginning of the end for the horse-drawn vehicle, though they were to continue in operation over some Chicago Streets until 1906.

With the march of progress in the transit industry at the turn of the century it was inevitable, however, that slower-moving vehicles would be replaced by more modern facilities. Cable cars provided an improvement, but for only a comparatively short time and on only a few lines. The powerful, efficient and economical electric streetcar was the new order of the day in local transit. So it came about that the last of cable cars operating in Chicago were taken out of service in 1906.

The first overhead trolley car on what is now CTA surface system began operation in the Calumet district in 1890, when the first electric streetcar went into service on 93rd Street from Stony Island to South Chicago.

Electrification of the existing surface lines properties continued with at least partial conversion from cable car to streetcar operation taking place on many lines between 1892 and 1906. Indicative of the changing trend were some of the lines on which trolleys began service during this period. These included 47th Street in 1892; Cermak and Cottage Grove in 1893; Clark in 1894; Halsted in 1895; Harrison, Indiana and Irving Park in 1896, and Adams, Clybourn, 55th, Madison, and Milwaukee in 1906. Thus was established the pattern of transportation development in all sections of the city radiating from the central business district which has been continuing ever since.

On February 1, 1914, all street railway properties in Chicago were unified under one management when an ordinance providing for consolidation of operations by the Chicago Surface Lines became effective. Prior to that date operation was by many separate companies.

**THIS PICTURE** of a cable railway train operated on State Street was taken in the year 1881.

This was an important milestone in local transportation history because it marked the realization of a long-time plan to coordinate the city-wide network of surface routes, making it the largest surface transportation system under single management in the United States.

Another step heralding the approach of a new era in local transit in Chicago occurred on August 11, 1927. This came when the first gasoline buses, forerunner of CTA's present fleet of motor vehicles, was placed in service on the Chicago Surface Lines' Diversey Avenue route. This was followed by another significant development in equipment replacement on April 17, 1930, by the installation of the first trolley bus service on Diversey between Milwaukee and Neva Avenues.

Though the full impact of these initial conversions from rail to rubber was not evidenced until later years, these developments marked the beginning of the end of streetcar operations in Chicago. The old red streetcars which had been a familiar sight on Chicago streets for more than three decades were on the way out. Though some 83 newer models of the old red cars were subsequently placed in operation in 1936, these were discarded and scrapped in 1956 and replaced by buses under the CTA modernization program.

In 1945, just two years before the CTA "takeover" in 1947, the Chicago Surface Lines purchased 600 of the so-called "Green Hornet" streetcars. CSL also provided for the conversion of lines from streetcar to bus service by additional purchases to start a large fleet of ultra-modern buses.

The "Green Hornet" streetcars, too, are gradually being taken out of service on surface routes. However, component parts of these units are being utilized in building cars suitable for operation on the rapid transit system, thus extending their usefulness in the total modernization program of the city's transportation facilities which has made such progress under CTA operation.

**ONE OF THE** early type trolley cars. This picture of one of the cars operating out of Kedzie station was taken in 1904.

**THE LAST** of the old, red streetcars, some of which operated on Chicago's streets for a half century, disappeared from the scene during 1954. Shown here is the type of streetcar purchased in 1908-09.

# *The Chicago Rapid Transit Company*

The Chicago Rapid Transit Company, which CTA purchased October 1, 1947, along with the Chicago Surface Lines, started operations in 1892.

That was the year that Chicago was making all-out preparations for the World's Columbian Exposition of 1893 in Jackson Park. Actually this initial section of Chicago's rapid transit system was built to provide service between downtown and the exposition site.

The first section of the new "High Line" to go into service extended from Congress Street only as far south as 39th Street. At that time a large part of the South Side was little more than prairie, but by May 1, 1893, when the pioneer "L" line was completed to Jackson Park, construction of homes, apartment buildings and commercial properties was booming in the area.

Continued expansion of the area development was reflected in construction of the Englewood, Normal Park, Kenwood, and Stock Yards branches of the South Side "L" in 1907 and 1908. All of these branches are part of the rapid transit facilities now being operated by CTA with the exception of the Normal Park branch. It was abandoned in 1954 because patronage had dwindled almost to the vanishing point.

The second rapid transit line built was the Lake Street Elevated Railroad, which began operation of the first section on November 6, 1893. The Lake Street line was gradually extended westward to a terminal at Austin Avenue in 1899; to Harlem Avenue in 1901, and to its present terminal in Forest Park in 1910.

Another section of the West Side and new areas on the Northwest Side benefited with the construction of the next elevated facility—the Metropolitan West Side Elevated Railroad. The first section to be built by this company—the Garfield Park branch—extended from Canal Street to Robey Street, now Damen Avenue.

Service on this section of the Garfield Park branch started May 6, 1895. Soon thereafter the elevated structure was completed to Logan Square with service being extended to that point later in the year.

The next stage in the development of the West Side "L" came in June, 1895, when service on the main Garfield Park route was extended from Damen Avenue (then Robey Street) to Cicero Avenue. Service to the present terminal at Forest Park was established in 1905, and to Bellwood and Westchester in 1926.

Another branch line was added to the rapidly-growing Metropolitan System when trains began operating over the Humboldt Park branch on July 29, 1895. This was followed by still another addition when the Douglas Park branch was placed in service as far as Western Avenue in 1896.

As the Southwest area of the city developed, the Douglas Park branch was extended from Western Avenue to Crawford Avenue (now Pulaski Road) in 1902; to Cicero Avenue in 1907; to 62nd Avenue in 1915, and to Oak Park Avenue in Berwyn in 1924. The present West terminal of the Douglas Park rapid transit route is 54th Avenue, Cicero.

Until 1897 the various rapid transit lines did not have a common terminal in the downtown area, but in that year construction of the famous elevated Loop—from which the central business district gets its name—was completed. Lake Street, South Side, West Side and Northwest Side trains began operating over the Union Loop, although each of the companies continued to charge separate fares without the privilege of transfer-interchange.

In 1900, the fourth rapid transit company, Northwestern Elevated Railroad, completed the first stage of its construction and started service between the Loop and Wilson Avenue in May of that year. Subsequent additions provided the Ravenswood branch in 1907 and extensions of the main line to Central Street, Evanston, in 1908, and to Linden Avenue, Wilmette, in 1921. In 1925 a branch line to Niles Center—now Skokie—was opened.

In 1913, all four of the rapid transit companies—the South Side Elevated Railroad, the Lake Street Elevated Railroad, the Metropolitan West Side Elevated Railroad, and the Northwestern Elevated Railroad—began operating coordinated service. Through routing of trains and a single rate of fare with transfer interchange facilities at Loop stations were established for the first time. Then, in 1924, the four lines were consolidated as the Chicago Rapid Transit Company, operating under a single management.

Under CTA operation, lightly-used stations have been closed, alternate-stop, all-express operation has been established on the major routes, and the service on dying branches, where patronage had fallen far below the volume required for rapid transit service, has been discontinued.

The Humboldt Park branch on the Northwest Side, the Normal Park branch on the South Side, the Niles Center (now Skokie) branch, and the Westchester branch no

**IN 1893, the first train was operated on the Lake Street elevated. All of the coal-burning, steam locomotives were given Christian names and initials. Shown here is the "Clarence A."**

longer exist, but in each instance adequate bus service is provided.

As a result of these measures, rapid transit service has been speeded up so that Chicago now has the fastest rapid transit service in its history, rapid transit patronage is increasing, operating losses have been reduced, and more than 875 old wood-steel cars have been retired from service. Within two years the few remaining old wood-steel cars will be scrapped.

Both the South Side Elevated and the Lake Street Elevated Railroad Companies began operating with tiny "steam dummy" engines, which burned hard coal. The Metropolitan West Side Elevated Railroad was also designed for operation with steam locomotives, but before construction work was completed it was decided to use electric motor cars. Thus, on May 6, 1895, the Metropolitan became the first electrically-operated rapid transit road in the world.

The Lake Street Elevated Railroad was electrified in 1896, and the South Side Elevated Railroad in 1898. Electrification of the South Side Elevated Railroad gave Chicago another first in the electrically operated rapid transit field—the first multiple unit control motor car.

Multiple unit control permits all cars of a rapid transit train to be operated from control equipment in the cab of the lead car. This system of control, basically unchanged since its introduction in Chicago in 1898, is now universally used throughout the world in the operation of electric trains.

## *Chicago Motor Coach Company*

Purchase of the Chicago Motor Coach Company on October 1, 1952, brought the last of Chicago's major local transit companies into the CTA organization and marked the final step in providing Chicago with fully unified local transit service, a goal that had been sought for more than half a century.

The first buses to be used in mass transit in Chicago were operated by the Chicago Motor Bus Company, which was established in 1917. When this company went into bankruptcy in 1922, the Chicago Motor Coach Company became its successor and in the ensuing years it became an important factor in local transportation in Chicago.

The Chicago Motor Coach Company, which was a wholly-owned subsidiary of The Omnibus Corporation, began operations with 63 buses serving 18.4 miles of North Side boulevards. During the year 1922, patronage approximated 9,600,000 passengers.

By the time CTA acquired the company, it had grown to the point where it was operating over 172 miles of the boulevards and streets of Chicago and had a fleet of 595 buses carrying nearly 85,000,000 passengers annually.

The greatest period of expansion of Chicago Motor Coach facilities occurred during its first five years, its operations being increased to 134.4 street miles at December 31, 1927, its fleet from 63 to 432 buses, and its employes from approximately 200 to 1,800.

During this period, 29 new routes were added throughout the city, most of them also operating over the boulevards and park drives of the Chicago Park District. Thus the Chicago Motor Coach Company came to be known as "The Boulevard System."

In the beginning, the company's passenger equipment consisted solely of open-top, double-deck motor coaches. Due to the severity of Chicago winters, however, this type of vehicle did not prove practical. Closed-top double-deckers were introduced in 1923, but also in 1923 single-deckers began to replace double-deckers on some of the lightly-patronized routes. Some of the closed-top double-deckers, however, remained in service as late as 1950.

The first of these buses ran on solid rubber tires. The earlier single deck units arriving in 1923 were also the first to roll on pneumatic tires.

Another interesting feature of the first open-top double-deck buses was a removable body feature, which made possible a transfer of the body and a part of the rear chassis from one front chassis to another.

**THE FIRST open top double-deck motor coach was operated in Chicago in 1917. This was known as the front-tractor type with all of the power being transmitted from the engine to the front wheels. The cost of this coach was about $9,500.**

**THIS OPEN top, double-deck, two-man coach was placed in service in Chicago during 1923. Note the hard rubber tires on wheels. The upper deck seated 39 and the lower section seated 28 passengers. The original cost of this model was about $8,875.**

## *City Owned Subways*

The State Street Subway and the Milwaukee-Dearborn-Congress Subway, being operated by Chicago Transit Authority as major units of its rapid transit system, are owned by the City of Chicago.

The first in Chicago's history, these two subways were built at a cost of $75,000,000 of which $25,967,000 was contributed by the Federal Government.

The city's share was financed from the city's Traction and Transit Fund. This fund was built up over the years by payments from passenger revenues made to the city by the privately-owned transit companies for the right to operate local transit services.

Thus, no direct taxes or special assessments were levied to finance construction of these two important units of the city's rapid transit facilities.

Chicago Transit Authority, however, is reimbursing the city for the cost of the fixed transportation equipment of two subways, approximately $8,640,000, by annual payments from its passenger revenues over a period of approximately 30 years.

Together the two subways provide 17.2 miles of single-track underground rapid transit facilities. Vast quantities of materials were used in building them—150,000 tons of steel, 1,250,000 barrels of cement, 1,250,000 cubic yards of sand and stone, 300 miles of conduit, and large amounts of other materials. More than 2,500,000 cubic yards of clay were excavated in tunneling the tubes and building the mezzanine stations.

Construction of the State Street Subway, which is 4.9 miles long, started in December, 1938. Extending from a connection with the North Side "L" near Armitage and Sheffield Avenues, southeast in Clybourn Avenue, east in Division Street and south in State Street to a connection with the South Side "L" near 16th Street, this subway was placed in service October 17, 1943.

Construction of the Milwaukee-Dearborn-Congress Subway began in March, 1939, and proceeded simultaneously with construction of the State Street Subway until 1942 when material requirements of World War II compelled a four-year shut-down. Work was resumed March 25, 1946, and this subway was placed in service by Chicago Transit Authority on February 25, 1951.

The State Street Subway is used by the trains of CTA's North-South rapid transit route, and the Milwaukee-Dearborn-Congress subway by the trains of the Logan Square rapid transit route. Each subway has nine stations, and the two subways are connected by four pedestrian passageways—mezzanine-level passageways at Court Place and Quincy Street, and low-level transfer passageways at Washington Street and Jackson Boulevard.

For the convenience and safety of passengers, there are a number of outstanding equipment features in the two subways. The rails are welded together in long sections

and are fastened to tie-plates with rubber insets to provide a smoother ride and to minimize operating noises.

Reversible escalators supplement stairways between mezzanine stations and train platforms, saving steps for thousands of riders daily. At heavily patronized mezzanine stations, coin-operated turnstiles and automatic transfer-issuing machines enable patrons to avoid standing in line at agents' booths during rush hours.

Mezzanine stations and train platforms are illuminated by fluorescent lights. Chicago pioneered in the use of lights of this type in subways.

Ventilation is efficient and effective. The ventilating system harnesses the "piston action" of the trains. As the trains move through the tubes, they push columns of air ahead of them, and draw columns of air in their wake. Vent shafts connected with street level permit air pushed or drawn by moving trains to enter or leave the subways.

During peak periods of operation, the piston action of trains will move about 3,500,000 cubic feet of air per minute through the two subways. This "piston action" system is supplemented by huge electrically-operated fans capable of providing another 2,000,000 cubic feet of fresh air per minute.

Operation of trains through the two subways is safeguarded by the most modern signal and interlocking system available. Each set of tracks is divided into a series of blocks with automatic signals guarding the entrance and exit of each block. Tripping devices in the track area automatically set the brakes and stop any train should a motorman attempt to proceed without a clear signal.

**CTA OPERATES Chicago's $75,000,000 city-owned subways—the State Street and the Milwaukee-Dearborn-Congress Subways. A third, now under construction by the city at a cost of $25,000,000, to connect the Congress Subway with the West Side Expressway, is tentatively scheduled for operation late in 1957.**

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